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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/501,408	02/10/2000	Frederic Serre	A32979-070337.0181	3806
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BUCHANAN, INGERSOLL & ROONEY PC POST OFFICE BOX 1404 ALEXANDRIA, VA 22313-1404			EXAMINER SHOSHO, CALLIE E	
			ART UNIT	PAPER NUMBER
			1714	

DATE MAILED: 10/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/501,408

Applicant(s)

SERRE, FREDERIC

Examiner

Callie E. Shosho

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 23-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 23-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. All outstanding rejections except for those described below are overcome by applicant's amendment filed 7/27/06.

The new grounds of rejection set forth below are necessitated by applicant's amendment and thus, the following action is final.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 23-42 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 23 and claim 29 have each been amended to recite that the tire comprises "bead zone". It is the examiner's position that this phrase fails to satisfy the written description requirement under the cited statute since there does not appear to be a written description requirement of the phrase "bead zone" in the application as originally filed, *In re Wright*, 866 F.2d 422, 9 USPQ2d 1649 (Fed. Cir. 1989) and MPEP 2163.

As support for the above amendment, applicants point to page 1, last paragraph and the paragraph bridging pages 4-5 of the present specification.

However, while these portions of the specification disclose that the bottom zone of the tire comprises bead and bead wire, there is no disclosure of "bead zone" as now recited in the present claims. Further, there is no disclosure that "bottom zone" and "bead zone" are equivalent terms. Additionally, it is not clear that the portion of the tire encompassed by the phrase "bottom zone" is the same as the portion of the tire encompassed by the phrase "bead zone".

Claim Rejections - 35 USC § 103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 23-25, 29-31, 35, and 36-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Segatta et al. (U.S. 6,776,206) in view of JP 09302146.

The disclosure is adequately set forth in paragraph 11 of the office action mailed 2/27/06 and is incorporated here by reference.

Further, it is noted that given that the composition of Segatta et al. disclose the use of 20-200 phr carbon black and 5-25 phr silica, it is clear that the amount of silica present is greater than or equal to the amount of carbon black in phr minus 5 phr, i.e. when there is present 15 phr silica and 20 phr carbon black, 25 phr silica and 22 phr carbon black, etc.

6. Claims 26-27 and 32-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Segatta et al. in view of JP 09302146 as applied to claims 23-25, 29-31, 35, and 36-37 above, and further in view of Takeichi et al. (U.S. 6,008,295).

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The disclosure is adequately set forth in paragraph 12 of the office action mailed 2/27/06 and is incorporated here by reference.

7. Claims 26, 28, 32, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Segatta et al. in view of JP 09302146 as applied to claims 23-25, 29-31, 35, and 36-37 above, and further in view of Fukahori et al. (U.S. 5,844,050).

The disclosure is adequately set forth in paragraph 13 of the office action mailed 2/27/06 and is incorporated here by reference.

8. Claims 38-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Segatta et al. in view of JP 09302146 as applied to claims 23-25, 29-31, 35, and 36-37 above, and further in view of Vanel (U.S. 6,211,278).

The disclosure is adequately set forth in paragraph 14 of the office action mailed 2/27/06 and is incorporated here by reference.

9. Claims 41 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Segatta et al. (U.S. 6,776,206) in view of JP 09302146.

Segatta et al. disclose tire wherein the apex, i.e. portion of the tire which is located axially to the outer side of the carcass poly turn-up, comprises composition comprising 80-97 parts natural rubber or cis 1,4-polyisoprene, 20-200 phr carbon black, about 5 to about 25 phr precipitated silica, i.e. hydrated amorphous silica, silane coupling agent, and additional diene elastomer. Given that the composition of Segatta et al. disclose the use of 20-200 phr carbon

black and 5-25 phr silica, it is clear that the amount of silica present is greater than or equal to the amount of carbon black in phr minus 5 phr, i.e. when there is present 15 phr silica and 20 phr carbon black, 25 phr silica and 22 phr carbon black, etc. (col.1, lines 9-13 and 20-22, col.2, lines 30-41, col.3, lines 45-49, and col.3, line 66-col.4, line 6).

The difference between Segatta et al. and the present claimed invention is the requirement in the claims of (a) amount of silica and (b) the surface area of the carbon black and the surface area of the silica.

With respect to difference (a), it is noted that Segatta et al. disclose the use of “about 25 phr” silica while the present claims require 30 phr silica.

It is apparent, however, that the instantly claimed amount of silica and that taught by Segatta are so close to each other that the fact pattern is similar to the one in *In re Woodruff*, 919 F.2d 1575, USPQ2d 1934 (Fed. Cir. 1990) or *Titanium Metals Corp. of America v. Banner*, 778 F.2d 775, 227 USPQ 773 (Fed.Cir. 1985) where despite a “slight” difference in the ranges the court held that such a difference did not “render the claims patentable” or, alternatively, that “a prima facie case of obviousness exists where the claimed ranges and prior art ranges do not overlap but are close enough so that one skilled in the art would have expected them to have the same properties”.

In light of the case law cited above and given that there is only a “slight” difference between the amount of silica disclosed by Segatta et al. and the amount disclosed in the present claims, it therefore would have been obvious to one of ordinary skill in the art that the amount of silica disclosed in the present claims is but an obvious variant of the amount disclosed in Segatta et al., and thereby one of ordinary skill in the art would have arrived at the claimed invention.

With respect to difference (b), JP 09302146, which is drawn to tire, disclose the use of composition for bead filler (a reinforcing layer found axially outside the turn-up portion of the carcass and extending radially from the bead core) comprising carbon black possessing surface area of 50-150 m²/g and silica possessing surface area of 210-300 m²/g. It is disclosed that if the surface area of the carbon black is less than 50 m²/g, there is poor hardness while if the surface area is greater the 150 m²/g, there is an increase in loss tangent. Further, it is disclosed that if the surface area of the silica is less than 210 m²/g, there is poor hardness, while if the surface area is greater than 300 m²/g, the composition is difficult to manufacture (paragraphs 10-11).

In light of the motivation for using carbon black and silica with specific surface area disclosed by JP 09302146 as described above, it therefore would have been obvious to one of ordinary skill in the art to use such carbon black and silica in the apex of the tire of Segatta et al. in order to produce tire with good hardness and low loss tangent that is easy to manufacture, and thereby arrive at the claimed invention.

Response to Arguments

10. Applicant's arguments regarding Vasseur (U.S. 5,871,597) and Chauvin (U.S. 2004/0092647) have been considered but they are moot in view of the discontinuation of the use of these references against the present claims.

11. Applicant's arguments filed 7/27/06 have been fully considered but, with the exception of arguments relating to Vasseur and Chauvin, they are not persuasive.

Specifically, applicant argues that Segatta et al. is not a relevant reference against the present claims given that the use of silica in Segatta et al. is optional.

It is agreed that the use of silica in Segatta et al. is optional. However, while this means that in one embodiment of Segatta et al. silica is not utilized, it is significant to note that in another embodiment of Segatta et al., silica is in fact utilized.

Applicant argues that there is no disclosure in Segatta et al. of specific type of silica utilized.

However, attention is drawn to col.4, lines 5-6 of Segatta et al. that discloses the use of hydrated amorphous silica which is well known, as evidenced by Staley (U.S. 5,496,486), as precipitated silica (col.4, lines 58-59).

Applicant argues that there are no examples in Segatta et al. that utilize silica in amount as presently claimed and that the examples utilize silica in minor amount only. As evidence to support this position, applicant points to example 2 (col.6, lines 46-49) of Segatta et al.

While it is agreed that there are no examples in Segatta et al. that utilize silica in amount as presently claimed, it is noted that “applicant must look to the whole reference for what it teaches. Applicant cannot merely rely on the examples and argue that the reference did not teach others.” *In re Courtright*, 377 F.2d 647, 153 USPQ 735,739 (CCPA 1967). A fair reading of the reference as a whole discloses that, in one embodiment, Segatta et al. utilize about 5 to about 25 phr silica. Further, with respect to example 2, it is noted that Segatta et al. disclose that “conventional” amounts of silica are utilized. Given the disclosure in col.4, lines 3-5 of Segatta

et al. that, if used, the silica is present in amount of about 5 phr to about 25 phr, it would appear that about 5 phr to about 25 phr silica is the conventional amount referred to in example 2.

Applicant argues that there is no disclosure in Segatta et al. that the amount of silica is greater than or equal to the amount of carbon black in phr minus 5 phr as required in present claim 23.

While there is no explicit disclosure regarding the relationship between the amount of silica and the amount of carbon black, in light of the amount of carbon black, i.e. 20-200 phr, and the amount of silica, i.e. 5-25 phr, utilized in Segatta et al., it is clear that the amount of silica present is in fact greater than or equal to the amount of carbon black in phr minus 5 phr, i.e. when there is present 15 phr silica and 20 phr carbon black, 25 phr silica and 22 phr carbon black, etc.

Applicant argues that there is no disclosure in JP 09302146 of precipitated or pyrogenic silica as presently claimed.

It is agreed that while JP 09302146 broadly discloses the use of silica, there is no explicit disclosure of precipitated or pyrogenic silica as now required in all the present claims. However, JP 09302146 is not used for its teaching of specific type of silica; this is already disclosed by Segatta et al. Rather, JP 09302146 is used to teach the surface area of silica utilized in bead filler portion of tire.

Applicant argues that Segatta et al. is not a relevant reference against present claim 29 given that this claim requires that silica is the sole reinforcing filler while Segatta et al. always requires the use carbon black.

However, in light of the open language of the present claims with respect to the composition, i.e. "comprising", it is clear that the composition of claim 29 is open to the inclusion of additional ingredients including carbon black as disclosed by Segatta et al.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

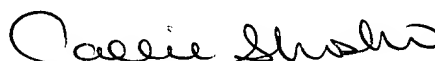
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 571-272-1123. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Callie E. Shosho
Primary Examiner
Art Unit 1714

CS
10/14/06